## WHAT IS CLAIMED IS:

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- 1. A network for telephony and data communication comprising:
- (One) at least one electrically-conductive segment containing at least two distinct electrical conductors operative to conducting a low-frequency telephony band and at least one high-frequency data band, each of said segments having a respective first end and a respective second end;
- (Two) a first low pass filter connected in series to the respective first end of each of said segments, for establishing a lowfrequency path for said low-frequency telephony band;
- (Three)a second low pass filter connected in series to the respective second end of each of said segments, for establishing a low-frequency path for said low-frequency telephony band;
- (Four) a first high pass filter connected in series to the respective first end of each of said segments, for establishing a highfrequency path for said at least one high-frequency data band;
- (Five) a second high pass filter connected in series to the respective second end of each of said segments, for establishing a high-frequency path for said at least one high-frequency data band; and
- (Six) at least two outlets each operative to connecting at least one telephone device to at least one of said low-frequency paths, and at least two of said at least two outlets being operative to connecting at least one data device to at least one of said high-frequency paths;

wherein:

each of said paths electrically connects two of said outlets; and

each of said outlets that is coupled to more than one of said segments connects said low-frequency telephony paths among each of said coupled segments.

- 2. The network as in claim 1 wherein at least one of said segments is a telephone line.
  - 3. The network as in claim 1 wherein the telephony is analog telephony.
    - 4. The network as in claim 1 wherein:
    - (One) the telephony is ISDN;
- 10 (Two) said segments contain at least four separate electrical conductors; and
  - (Three)at least two of said distinct electrical conductors are operative to carrying data.
- 5. The network as in claim 1, wherein at least one of said highfrequency band is operative to carrying analog communication.
  - 6. The network as in claim 1, wherein at least one of said low pass filter is internal to one of said outlets.
  - 7. The network as in claim 1, wherein at least one of said low pass filter is external to all of said outlets.
- 20 8. The network as in claim 1, wherein at least one of said high pass filter is internal to one of said outlets.
  - 9. The network as in claim 1, wherein at least one of said high-frequency is external to all of said outlets.

- 10. The network as in claim 1, comprising a plurality of said segments and at least three of said outlets.
- 11. The network as in claim 10, wherein said first low pass filter of a first segment is connected to said second low pass filter of a second segment.

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- 12. The network as in claim 10, wherein said segments are connected serially by said outlets.
- 13. The network as in claim 10, wherein said high-frequency data paths of all of said segments are coupled together.
- 10 14. The network as in claim 1, wherein said low pass filter comprises a center-tap transformer and a capacitor.
  - 15. The network as in claim 1, wherein said high pass filter comprises a center-tap transformer and a capacitor.
  - 16. The network as in claim 1, furthermore connected to an xDSL system.
    - 17. The network as in claim 16, wherein said xDSL system is an ADSL system.
    - 18. The network as in claim 1, furthermore connected to the Internet.
- 20 19. An outlet for connecting devices to a telephone line for telephony and data communications, the telephone line having at least one electrically conductive segment containing at least two distinct electrical conductors operative to conducting a low-frequency telephony band and a high-frequency data band, the outlet comprising: